

embodiment of the invention (please see Fig. 2 and the specification at page 15, lines 10-11), the magnetic core is integrated with the stator 22. However, in another embodiment of the invention (please see Fig. 5 and the specification at page 22, lines 12-22), the magnetic core 76 is a separate component from the stator 75. The claim language is thus intended to encompass both such embodiments. It is respectfully submitted that the language of the claims is not restricted to only one embodiment or interpretation and thus satisfies the requirements of 35 U.S.C. 112, second paragraph.

Claims 16 and 17 have been amended to address the Examiner's concern but such clarification is not intended to further limit the scope of such claims. The Examiner's careful review is appreciated.

In view of the foregoing amendments and remarks, Applicant respectfully request favorable reconsideration of the present application.

Respectfully submitted,



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**Version With Markings To Show Changes Made  
IN THE CLAIMS**

16. (Amended) A method of setting plate thickness in a magnetic circuit in a power generator, the power generator including a rotor having a permanent magnet, a stator and a magnetic core made of a soft magnetic material constituting the magnetic circuit and a coil wound around the magnetic core,

wherein the plate thickness  $d$  of at least one of the stator and the magnetic core is set at a value represented by the following formula of

$$d = \sqrt{\frac{k_h}{k_e}} \rho \cdot f^{-0.375} B_m^{-0.175} \quad (1)$$

where  $k_h$  represents hysteresis loss coefficient,  $k_e$  represents eddy-current loss coefficient,  $\rho$  ( $\Omega \cdot m$ ) represents resistivity,  $f$  (Hz) represents frequency and  $B_m$  (T) represents maximum amplitude magnetic flux density of the soft magnetic material.

17. (Amended) A method of setting plate thickness in a magnetic circuit in a power generator, the power generator including a rotor having a permanent magnet, a stator and a magnetic core made of a soft magnetic material constituting the magnetic circuit and a coil wound around the magnetic core,

wherein the plate thickness  $d$  of at least one of the stator and the magnetic core is set within a plate thickness range determined so that iron loss  $W$  does not exceed a reference value  $W_2$ , the reference value  $W_2$  being obtained by a thickness  $d$  obtained in accordance with the following formula of

$$d = \sqrt{\frac{k_h}{k_e}} \rho \cdot f^{-0.375} B_m^{-0.175} \quad (1)$$

where  $k_h$  represents hysteresis loss coefficient,  $k_e$  represents eddy-current loss coefficient,  $\rho$  ( $\Omega \cdot m$ ) represents resistivity,  $f$  (Hz) represents frequency and  $B_m$  (T) represents maximum amplitude magnetic flux density of the soft magnetic material, which is assigned to the following formula of

$$W \cong k_h d^{-1} B_m^{1.65} + k_e \frac{1}{\rho} df^{0.75} B_m^2 \quad (6)$$

to calculate a minimum value  $W_1$  of the iron loss  $W$  ( $J/m^3$ ), the reference value  $W_2$  being set greater than the minimum value  $W_1$ .